

- 1 1. A circuit for sensing radio frequency energy, comprising:
2 a Wheatstone bridge having at least one element thereof thermally responsive to
3 the radio frequency energy passing therethrough differently from radio frequency energy
4 passing though at least one other element of the bridge.
- 1 2. A circuit for sensing radio frequency energy, comprising:
2 a Wheatstone bridge having a pair of parallel circuit paths disposed between a pair
3 of input nodes, each path having a pair of serially connected elements, each pair of
4 elements in each one of the paths being connected at a corresponding one of a pair of
5 output nodes, at least one element in a first one of the pair of paths being thermally
6 responsive to the radio frequency energy passing therethrough differently from radio
7 frequency energy passing though at least one other element in the other one of the pair of
8 paths.
- 1 3. The circuit recited in claim 2 wherein a first one of the input nodes is coupled to a
2 source of the radio frequency energy and to a source of dc voltage.
- 1 4. The circuit recited in claim 3 including a feedback loop responsive to a voltage
2 produced across the output node for providing a control voltage to the first one of the
3 pair of input node.
- 1 5. The circuit recited in claim 2 wherein the first one of the paths includes a capacitor
2 disposed in shunt with an electrical element having an electrical property varying with
3 the radio frequency energy passing through such electrical element.
- 1 6. The circuit recited in claim 5 wherein the electrical property is electrical resistance.
- 1 7. A circuit for sensing radio frequency energy, comprising:
2 a Wheatstone bridge having a pair of parallel circuit paths disposed between a pair
3 of input nodes, each path having a pair of serially connected elements, each pair of
4 elements in each one of the paths being connected at a corresponding one of a pair of
5 output nodes, at least one element in a first one of the pair of paths being thermally

6 responsive to the power passing therethrough differently from power passing though at
7 least one other element in the other one of the pair of paths;
8 wherein a first one of the input nodes is coupled to a source of the radio frequency
9 energy and to a source of dc voltage; and
10 a feedback loop responsive to a voltage produced across the output node for
11 providing a control voltage to the first one of the pair of input node.

1 8. The circuit recited in claim 7 wherein the first one of the paths includes a capacitor
2 disposed in shunt with an electrical element having an electrical property varying with
3 the radio frequency energy passing through such electrical element.

1 9. The circuit recited in claim 7 wherein the electrical property is electrical resistance.

1 10. The circuit recited in claim 9 wherein the electrical property is thermal resistance;

1 11. The circuit recited in claim 9 wherein the electrical property is thermal sensitivity.

1 12. A method for sensing power comprising:

2 (A) providing a Wheatstone bridge having:

3 a pair of parallel circuit paths disposed between a pair of input nodes, each path
4 having a pair of serially connected elements, each pair of elements in each one of the
5 paths being connected at a corresponding one of a pair of output nodes, at least one
6 element in a first one of the pair of paths being thermally responsive to the power passing
7 therethrough differently from power passing though at least one other element in the other
8 one of the pair of paths and wherein a first one of the input nodes is coupled to a source
9 of the radio frequency energy and to a source of dc voltage; and

10 a feedback loop responsive to a voltage produced across the output node for
11 providing a control voltage to the first one of the pair of input node;

12 (B) applying a first type of power to the bridge with the feedback loop
13 providing a voltage to the first one of the node and with such bridge being in a
14 balanced condition within the bridge; and

15 (C) applying a second type of power to the bridge with the bridge
16 becoming imbalanced from such applied second power and with the feedback
17 loop changing the voltage to the first node, such changed voltage providing an
18 indication of the application of the second type of power.

1 13. The method recited in claim 12 wherein the first type of power is dc power and the
2 second power is RF power.